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CLAIMS

What is claimed is:

- 1    1.    A user interface method, within a computer system, for transferring image data from scanner  
2        software to a software application, said method comprising:  
3        (a)    launching a preview scan of a document, with said scanner software loaded into a  
4               memory of a computer system, creating preview scan data of said document;  
5        (b)    displaying said preview scan data on a monitor connected to said computer system;  
6        (c)    selecting a region of interest from said preview scan data displayed on said monitor;  
7        (d)    receiving, into said memory in said computer system, a mouse down input signal  
8               from a graphical input device connected to said computer system, wherein said  
9               mouse down input signal selects said selected region of interest within said preview  
10              scan data;  
11        (e)    receiving, into said memory in said computer system, a mouse drop input signal from  
12               said graphical input device, wherein said mouse drop input signal selects said  
13               software application, wherein said software application was previously loaded into  
14               said memory in said computer system and displayed in an open application window  
15               on said monitor;  
16        (f)    launching, with said scanner software, a final scan of said document creating said  
17               image data, wherein said image data of said document corresponds to said selected  
18               region of interest;  
19        (g)    receiving said image data in said memory in said computer system; and  
20        (h)    sending said image data to said selected software application.
- 1    2.    A user interface method, within a computer system, for transferring data from scanner  
2        software to a software application according to claim 1 wherein step (a) further comprises  
3        step (a0) performed before step (a), and step (f) further comprises step (f1):  
4        (a0)    placing said document into a position to be scanned by a scanner connected to said  
5               computer system; and  
6        (f1)    receiving in said scanner, from said scanner software, a command to launch said final  
7               scan of said document, wherein said final scan creates said image data.
- 1    3.    A user interface method, within a computer system, for transferring data from scanner  
2        software to a software application according to claim 1 wherein step (d) further comprises  
3        steps (d1) and (d2):

- 4 (d1) receiving a data type for said selected region of interest in said memory in said  
5 computer system; and
- 6 (d2) retrieving at least one data format associated with said data type for said selected  
7 region of interest.

1 4. A user interface method, within a computer system, for transferring data from scanner  
2 software to a software application according to claim 3 wherein when said data type for said  
3 selected region of interest is true color, gray scale, palette, or black and white binary, said  
4 data format is a Windows Device Independent Bitmap format.

1 5. A user interface method, within a computer system, for transferring data from scanner  
2 software to a software application according to claim 3 wherein when said data type for said  
3 selected region of interest is black and white scalable vector, said data format is a Windows  
4 Metafile Clipboard format.

1 6. A user interface method, within a computer system, for transferring data from scanner  
2 software to a software application according to claim 3 wherein when said data type for said  
3 selected region of interest is text, said data format is an ASCII Text format or a Rich Text  
4 format.

1 7. A user interface method, within a computer system, for transferring data from scanner  
2 software to a software application according to claim 3 wherein step (e) further comprises  
3 the following steps (e0a) and (e0b) performed before step (e):  
4 (e0a) receiving a mouse over input signal from said graphical input device identifying said  
5 software application displayed on said monitor; and  
6 (e0b) querying said software application if said software application can accept drop input  
7 of said data type formatted into one of said at least one data format associated with  
8 said data type.

1 8. A user interface method, within a computer system, for transferring data from scanner  
2 software to a software application according to claim 7 wherein step (e) further comprises  
3 step (e1), and step (g) further comprises step (g0) performed before step (g):  
4 (e1) requesting, by said software application, that said image data be formatted into said  
5 one of said at least one data format associated with said data type that said software

6 application can accept; and

7 (g0) formatting said image data into said one of said at least one data format associated  
8 with said data type that said software application can accept.

1 9. A user interface method, within a computer system, for transferring data from scanner  
2 software to a software application according to claim 7 wherein step (e0b) further comprises  
3 the following step (e0b1):

4 (e0b1) displaying, in said open application window on said monitor when said software  
5 application cannot accept said drop input of said data type formatted into one of said  
6 at least one data format associated with said data type, a universal no icon in place  
7 of a pointer.

1 10. A user interface method, within a computer system, for transferring data from scanner  
2 software to a software application according to claim 1 further comprising the steps of:

3 (i) receiving said image data in said selected software application in said memory; and  
4 (j) displaying said image data in said open application window on said monitor.

1 11. A user interface method, within a computer system, for transferring data from scanner  
2 software to a software application according to claim 10 wherein said software application  
3 is a desktop.

1 12. A user interface method, within a computer system, for transferring data from scanner  
2 software to a software application according to claim 11 wherein step (i) further comprises  
3 steps (i1) through (i3):

4 (i1) creating a file, by file manager software within an operating system loaded into said  
5 memory, upon receiving said image data into said memory, wherein a file type of said  
6 file is determined based on said data type;

7 (i2) saving said file as said file type in said computer system; and

8 (i3) displaying a representation of said file of said file type as an icon on said desktop.

1 13. A user interface method, within a computer system, for transferring data from scanner  
2 software to a software application according to claim 10 wherein said software application  
3 is a writeable folder.

- 1 14. A user interface method, within a computer system, for transferring data from scanner  
2 software to a software application according to claim 13 wherein step (i) further comprises  
3 steps (i1) through (i3):  
4 (i1) creating a file, by file manager software within an operating system loaded into said  
5 memory, upon receiving said image data into said memory, wherein a type of said file  
6 is determined based on said data type;  
7 (i2) saving said file as said file type in said computer system; and  
8 (i3) displaying a representation of said file as an icon on said writeable folder.
- 1 15. A system for transferring data from scanner software to a software application, said system  
2 comprising:  
3 a scanner device, connected to a computer system, for scanning a document and for  
4 generating preview scan data of said document;  
5 a monitor, connected to said computer system, wherein said monitor displays said preview  
6 scan data of said document in a scanner window, and for displaying an open  
7 application window;  
8 a graphical input device, connected to said computer system, for selecting a region of  
9 interest from said preview scan data displayed in said scanner window;  
10 an operating system, operating within a memory within said computer system, for receiving  
11 a mouse down input signal from said graphical input device to select said selected  
12 region of interest, for receiving a mouse over input signal from said graphical input  
13 device to identify a software application loaded into said memory and displayed in  
14 said open application window, and for receiving a mouse drop input signal from said  
15 graphical input device to select said software application; and  
16 scanner software, operating within said memory within said computer system, for displaying  
17 said selected region of interest within said preview scan data of said document in said  
18 scanner window, and for launching a final scan of said document in said scanner  
19 device after said mouse drop input signal is received selecting said software  
20 application.
- 1 16. A system for transferring data from scanner software to a software application according to  
2 claim 15 wherein, after said operating system receives said mouse over input identifying said  
3 software application running within said open application window, said software application  
4 queries said scanner software to determine if said scanner software offers at least one data

5 format associated with said data type of said selected region of interest, wherein said  
6 software application can accept drop input of said data type in one of said at least one data  
7 formats.

1 17. A system for transferring data from scanner software to a software application according to  
2 claim 16 wherein said software application, after performing said query, requests one of said  
3 at least one data formats, and said scanner software, after completing said optimized final  
4 scan, formats image data from said optimized final scan into said one of said at least one data  
5 formats.

1 18. A system for transferring data from scanner software to a software application according to  
2 claim 17 wherein, when said scanner software completes said optimized final scan, said  
3 image data from said optimized final scan formatted into said one of said at least one data  
4 format is transferred from said scanner software to said software application, wherein said  
5 image data in said one of said at least one data format resides within said software  
6 application.

1 19. A system for transferring data from scanner software to a software application according to  
2 claim 18 wherein said image data in said one of said at least one data formats is displayed in  
3 said open application window.

1 20. A system for transferring data from scanner software to a software application according to  
2 claim 16 wherein said open application window is a desktop window.

1 21. A system for transferring data from scanner software to a software application according to  
2 claim 20 wherein after receiving said image data in said desktop window, file manager  
3 software within an operating system loaded into said memory creates a file, wherein a type  
4 of said file is determined based upon said data type, and further wherein said file is displayed  
5 as an icon in said desktop window.

1 22. A system for transferring data from scanner software to a software application according to  
2 claim 16 wherein said open application window is a directory window having at least one  
3 writeable folder.

- 1 23. A system for transferring data from scanner software to a software application document  
2 according to claim 22 wherein after receiving said image data in said at least one writeable  
3 folder in said directory window, file manager software within an operating system loaded  
4 into said memory creates a file, wherein a type of said file is determined based upon said data  
5 type, and further wherein said file is displayed as an icon in said writeable folder in said  
6 directory window.